

**[What Is Claimed Is]**

1. A microorganism producing 5'-xanthylic acid, which is a mutant strain of *Corynebacterium ammoniagenes* and characterized by having a resistance to 5-fluorotryptophan.
2. A microorganism according to claim 1 wherein said microorganism is *Corynebacterium ammoniagenes* CJXFT 0301 (Accession Number: KCCM-10530).
3. A method of producing 5'-xanthylic acid, characterized by using the microorganism of claim 1 or claim 2.